



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,943	10/14/2004	Tzu-Ming Chou	22171-00026-US1	5942
30678 7590 02/21/2008 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20036			EXAMINER PHAM, VAN T	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 02/21/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/711,943

Applicant(s)

CHOU ET AL.

Examiner

VAN T. PHAM

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-9 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/11/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 2/11/2008 have been fully considered but they are not persuasive.

3. Applicant's asserted, "Go et al. discloses the tracking error signal and the focus error signal *are not used* for determining whether the recording speed should be changed, "during recording", as recited in the claim invention. Instead, as discussed above, Go et al., discloses using the "wobble signal" for this purpose "during recording" as recited in the amended claims: However, ...references to the "wobble signal " in the claimed invention were removed by the previous amendment to the claims (note: see the amendment submitted on 08/17/2007). Therefore, Go et al. does not discloses this limitation of the claimed invention".

First of all, see [0008] ...at least one unstable signal source during the recording process is detected, where the unstable signal source is *selected from the group of the level of a focusing error (FE) signal, the level of a tracking error (TE) signal, a wobble synchronization pattern loss, the error rate of demodulating a wobble signal and the frequency of the buffer under-run occurrence* of the optical disk drive. The recording will be paused if any detected value of the unstable signal source exceeds a preset

threshold value. Afterwards, the rotation speed of the optical disk drive is decreased, and the recording is resumed with the decreased rotation speed.

According to the group of the level of:

a focusing error (FE) signal,

a tracking error (TE) signal,

a wobble synchronization pattern loss,

an error rate of demodulating a wobble signal, and

a frequency of the buffer under-run occurrence.

All 5 different unstable signal sources as listed above are equivalent for their purpose in representing an unstable recording condition.

Because Go et al. discloses the recording speed is determined by measuring a tracking error quality and a focus error quality of a blank disc before a recording operation. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the equivalent unstable signal sources as listed above in Go et al..

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Go et al. (US 2003/0198155).

Art Unit: 2627

Regarding claim 1, discloses a recording method for an optical disk drive, comprising the steps of:

detecting during recording at least one unstable signal source of the optical disk drive (see Fig. 2, element 104),

wherein the unstable signal source is selected from a group including (see response above)

a level of a focusing error signal,

a level of a tracking error signal (see Fig. 2, and [0020], [0024], [0042], [0012]),

and

a frequency of buffer under-run occurrence, and (see [0052])

ceasing recording if the detected value exceeds a preset threshold value (see Fig. 3, steps 301-305);

decreasing a rotation speed of the optical disk drive (see Fig. 3, step 306); and

resuming recording with the decreased rotation speed (see Fig. 3, step 307).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the equivalent unstable signal sources focus error signal or tracking error signal instead of wobble signal as listed above in Go et al., the motivation being in order for an optical disk drive to have ^{any} ~~equally~~ unstable signal sources which are equivalent for their purpose in representing an unstable recording condition.

Regarding claim 2, discloses the recording method for an optical disk drive in accordance with claim 1, further comprising the step of detecting whether the optical disk drive is recording before the unstable signal source is detected (inherently, see Fig. 3 and [0035]).

Regarding claim 3, discloses the recording method for an optical disk drive in accordance with claim 1, further comprising the step of ensuring that the recording is ceased after the operation of stopping recording is instructed (see Fig. 3).

Regarding claim 4, discloses the recording method for an optical disk drive in accordance with claim 1, wherein ceasing recording and decreasing the rotation speed of the optical disk drive are controlled by a microprocessor (Fig. 1).

Allowable Subject Matter

6. Claims 5-9 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Cited references

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to a method of searching for a boundary position between a recorded region and an unrecorded region of a recording disk, and information recording apparatus; Disk drive apparatus capable of resuming the recording process during interruption.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER